

INTERNATIONAL SEARCH REPORT

Application No
PCT/US 03/11267

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G03B42/02 A61B6/14 G03C11/02 G01N23/04 G03B42/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B G03B G01N G03C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

WPI Data, PAJ, INSPEC, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 123 040 A (FABIAN CARL E) 16 June 1992 (1992-06-16) column 3, line 39 -column 4, line 64; figures 1-5	1-9, 11-14, 20,21, 25,30,36
X	CH 564 943 A (HURNI WILLY) 15 August 1975 (1975-08-15) the whole document	1-9, 11-14, 20,21, 25,26, 30,36

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

25 July 2003

Date of mailing of the international search report

04/08/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bähr, A

INTERNATIONAL SEARCH REPORT

Application No
PCT/US 03/11267

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 2 426 286 A (STADLER FRANK J) 26 August 1947 (1947-08-26)</p> <p>the whole document</p>	<p>1-9, 11-14, 20,21, 25,30,36</p>
X	<p>US 5 195 122 A (FABIAN CARL E) 16 March 1993 (1993-03-16)</p> <p>column 5, line 26 -column 8, line 21; figures 1-7</p>	<p>1,6-9, 11-14, 20-23, 25-27, 30-32</p>
X	<p>US 6 354 737 B1 (HUFER MARK J ET AL) 12 March 2002 (2002-03-12) column 3, line 41 -column 9, line 5; figures 1-7</p>	<p>30-35</p>
A	<p>US 4 995 108 A (TANAKA HIROYUKI) 19 February 1991 (1991-02-19)</p> <p>column 3, line 18 -column 6, line 12; figures 1-8</p>	<p>1-9, 11-14, 20,21, 25,30, 31,36</p>
A	<p>US 5 202 911 A (FABIAN CARL E) 13 April 1993 (1993-04-13) column 3, line 63 -column 5, line 65; figures 1-7</p>	<p>1,9,14, 24,30,36</p>
A	<p>US 1 748 490 A (MARTIN FREDERICK C) 25 February 1930 (1930-02-25) the whole document</p>	<p>1,30,36</p>

INTERNATIONAL SEARCH REPORT

Indicate dependent patent family members

tr Application No

PCT/US 03/11267

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5123040	A	16-06-1992	AU 8534191 A EP 0546072 A1 WO 9203763 A1	17-03-1992 16-06-1993 05-03-1992
CH 564943	A	15-08-1975	CH 564943 A5	15-08-1975
US 2426286	A	26-08-1947	NONE	
US 5195122	A	16-03-1993	NONE	
US 6354737	B1	12-03-2002	CA 2390538 A1 EP 1228361 A1 JP 2003513726 T WO 0135085 A1	17-05-2001 07-08-2002 15-04-2003 17-05-2001
US 4995108	A	19-02-1991	CA 1314420 C DE 68919815 D1 DE 68919815 T2 EP 0374361 A2 KR 9501426 Y1	16-03-1993 19-01-1995 13-07-1995 27-06-1990 06-03-1995
US 5202911	A	13-04-1993	US 5166967 A AU 8498991 A DE 69109300 D1 DE 69109300 T2 EP 0546040 A1 WO 9203761 A1	24-11-1992 17-03-1992 01-06-1995 31-08-1995 16-06-1993 05-03-1992
US 1748490	A	25-02-1930	NONE	

THIS PAGE BLANK (USPTO)
